

SIX NEW SPECIES OF NORTH AMERICAN ZEPHYRANTHES

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Zephyranthes, indigenous and limited to the Western Hemisphere, is an entirely American genus of the Amaryllidaceae. Some sixty species occur in warm temperate to tropical areas, from near sea level to plateau and mountainous regions. Although several North American species have been reported in recent years, other accessions have not been described. Of these taxa, one is from Guatemala, three from Mexico, one is a natural hybrid found in Panama by the late Ira Nelson, and one is a greenhouse volunteer seedling hybrid.

Zephyranthes guatemalensis L. B. Spencer, sp. nov. Bulbo globoso 2.2 cm diametro, collo 3.5 cm longo; foliis ad 35 cm longis, 4-6 mm latis, primo erectis, concavis, subviridissimis; scapo 14-18 cm longo, prope basin rubello; pedicello 4-7 mm longo; ovario 1.5-3 mm; spatha 2-2.3 cm longo, bifida in dimidio superiore; perianthi tubo 1.7-2.5 cm longo; perianthio albo 5 cm longo. segmentis oblanceolatis, sepalis 1-2 cm latis, petalis 9 mm latis; filamentis 3 cm longis; antheris 1 cm longis; stylo 4 cm longo; stigmatibus trifido, antheras superanti. Chromosomatum numerus: 2n-36 (Flagg unpub.).

Bulb globose, 2.2 cm diam, neck 3.5 cm long; leaves to 35 cm long, 4-6 mm wide, erect at first, concave, very light green; scape 14-18 cm long, reddish near base; pedicel 4-7 mm; ovary 1.5-3 mm; spathe 2-2.3 cm long, bifid 1/2 way; perianth tube 1.7-2.5 cm long; perianth white, 5 cm long; segments oblanceolate, sepals 1-2 cm wide, petals 9 mm wide; filaments 3 cm long; anthers 1 cm long; style 4 cm long; stigma trifid, exceeds anthers. Chromosome number: 2n-36 (Flagg unpub.).

Type specimen: Antigua, Guatemala, O. E. White, 1 Jul 1947; brought to BEF 4 Oct 1947, BEF 11433-47-54, spec. from cult., 12 June 1962, rof (WFU). Holotype (WFU); Isotype (WFU).

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Zephyranthes latissimafolia L. B. Spencer, sp. nov. Bulbo ad 2.5 cm diametro, collo 3.5 cm longo; foliis plerumque quinque, 8-19 cm longis, 7-9 mm ad basim latis, 3-4 mm ad apicem obtusum; scapo 7 cm longo, tenuissimo, ad 16 cm fructifero; ovario sessili 7 mm longo; spathe 2.5 cm longa, bifida; perianthi tubo 1 cm longo; perianthio albo externe rubescenti; segmentis 3 cm longis, 1 cm latis; filamentis in duobus collocationibus; antheris surrectis; stigmatе trifido antheras subtendenti. Chromosomatum numerus: 2n-48 (Flagg, unpub.).

Bulb 2.5 cm diam; neck 3.5 cm; leaves usually 5, 8-19 cm long, 7-9 mm wide at base, 3-4 at obtuse tip; scape 7 cm long; very delicate, elongates to 16 cm in fruit; ovary 7 mm sessile; spathe 2.5 cm, bifid; perianth tube 1 cm; perianth white with pink flush without; segments 3 cm long, 1 cm wide; filaments at 2 levels, anthers sub-erect; stigma trifid, subtends anthers. Chromosome number: 2n-48 (Flagg, unpub.).

Type specimen: Mexico: Mexico 45, 11 mi S of Mexico 80 in Jalisco, near Guanajuato state line, bulbs collected 4 June 1961, BEF 15289-61, Flory and Flagg 48, spec. from cult., 6 Jul 1962 (WFU). Holotype (WFU); Isotype (WFU).

Zephyranthes katheriniae L. B. Spencer, sp. nov. Bulbo ovoideo ad 2 cm diametro, collo ad 1.5 cm longo, tunicis umbrinis; foliis erectis 25-35 cm longis, 2-3 mm latis; scapo 18-25 cm longo; spathe rosea, bifida, 2.7-3 cm longa; pedicello 2.8-3.8 cm longo; ovario 4 mm; perianthi tubo gracili, 2 cm longo; perianthio (cum tubo) 5.5-6 cm longo, flavo et profunde rubescenti; segmentis obovatis, acuminatis; staminibus dimidio quam segmentis brevioribus; stigmatе breviter trifido, antheras subtendenti. Chromosomatum numerus: 2n-48 (Flagg, 1961).

Bulb ovoid, 2 cm diam; neck 1.5 cm long, dark brown tunics; leaves erect, from 25-35 cm long, 2-3 mm wide; scape 18-25 cm long; spathe pink, bifid, 2.7-3 cm long; pedicel 2.8-3.8 cm long; ovary 4 mm; perianth tube slender, 2 cm long; perianth 5.5-6 cm including tube, yellow heavily flushed with red; segments obovate, acuminate; stamens 1/2 length of segments; stigma shortly trifid, subtends anthers. Chromosome number: 2n-48 (Flagg, 1961).

Type specimen: Mexico: near Jacala, Mrs. Morris Clint M 618, 30 Sep 1957, bulbs BEF 14164-57, 27 Dec 1961, spec. from cult., (WFU). Holotype (WFU); Isotype (WFU).

Zephyranthes subflava L. B. Spencer, sp. nov. Bulbo subglobo 8-12 cm diametro, collo 5-6 mm longo; foliis 27 cm longis, 2-3 mm latis, aliquantum tortis; scapo 21 cm longo; spatha bifida aut fenestrata, 2.2 cm longa; pedicello 3.5 cm longo; ovario 4 mm; perianthi tubo 1.2 cm longo; perianthio eburneo 5 cm longo; segmentis acutis, sepalis 10-11 mm latis, petalis 9 mm latis; filamentis eiusdem coloris quam perianthio, 13 mm longis; antheris flavis, 1 cm longis; stylo 2.7 cm longo; stigmatate trifido antheras superanti. Chromosomatum numerus: 2n-24 (Flagg unpub.).

Bulb subglobose, 8 mm diam; neck 5-6 mm long; leaves 27 cm long, 2-3 mm wide, somewhat twisted; scape 21 cm long; spathe bifid or fenestrated, 2.2 cm long; pedicel 3.5 cm long; ovary 4 mm; perianth tube 1.2 cm; perianth ivory-yellow, 5 cm long; segments acuminate, sepals 10-11 mm wide, petals 9 mm wide; filaments color of perianth, 13 mm long; anthers yellow, 1 cm long; style 2.7 cm long; stigma trifid, exceeding anthers. Chromosome number: 2n-24 (Flagg unpub.).

Type specimen: Mexico: State of San Luis Potosi, in valley E of El Naranjo (Maiz Road), Mrs. Morris Clint M-550, 15 Oct 1961, bulbs BEF 14182-57, spec. from cult., 27 Dec. 1961 (WFU); Isotype (WFU).

Zephyranthes x flaggii L. B. Spencer, sp. nov. Bulbo subglobo ad 2.2 cm diametro, collo 12-13 mm longo; foliis 12-15 cm longis, 2-3 mm latis; scapo 8-12 cm longo; pedicello 1.5-2.1 cm longo; ovario 2 mm; spatha subrosea, bifida, plerumque quam pedicello longiore, 1.8-2.1 cm longa; perianthio pallide roseo (cum tubo) 2.5-3.5 cm longo; segmentis oblanceolatis, 6-8 mm latis; filamentis binatim 1.2 cm longis; antheris 6-8 mm longis, flavis; stylo 2-2.5 cm longo; stigmatate penitus trifido, antheras multo superanti. Chromosomatum numerus: 2n-21 (Flagg unpub.).

Bulb subglobose 2.2 cm diam, neck 12-13 mm long; leaves 12-15 cm long, 2-3 mm wide; scape 8-12 cm long; pedicel 1.5-2.1 cm long; ovary 2 mm; spathe pinkish, bifid, usually longer than pedicel, 1.8-2.1 cm long; perianth delicate pale pink, 2.5-3.5

cm long including tube; segments oblanceolate, 6-8 mm wide; filaments in 2 sets, 1.2 cm long; anthers 6-8 mm long, yellow; style 2-2.5 cm long; stigma deeply trifid, far exceeding anthers. Chromosome number: $2n=21$ (Flagg unpub.).

Type specimen: (apparently natural hybrid between Z. albi-ella and Z. rosea), described on wrapping "No. 8-2-A; pink Zephyranthes from Panama." BEF 13302-56, spec. from cult., 14 Dec 1961 (WFU). Holotype (WFU); Isotype (WFU).

Zephyranthes x floryi L. B. Spencer, sp. nov. Bulbo 1.9-2.5 cm diametro, collo 2.0-2.8 cm longo, libere prolificanti; foliis 37 cm longis, 4 mm latis; scapo 16 cm longo; spatha rosea, bifida, 2.6 cm longa; ovario 4 mm; perianthio roseo (cum tubo) 4.3-5 cm longo; segmentis oblanceolatis; filamentis 2 cm longis; antheris 1 cm longis; stylo 3-3.2 cm longo; stigmate trifido antheras superanti. Chromosomatum numerus: $2n=45$ (Flagg unpub.).

Bulb 2.5 cm diam, neck 2 cm long, proliferates freely; leaves 37 cm long, 4 mm wide; scape 16 cm long; spathe pink, bifid, 2.6 cm; ovary 4 mm; perianth pink, 4.3-5 cm long including tube; segments oblanceolate; filaments 2 cm long; anthers 1 cm long; style 3-3.2 cm long; stigma trifid, exceeds anthers. Chromosome number $2n=45$ (Flagg unpub.).

Type specimen: BEF 14589-59, found by W. S. Flory in 1947, as a volunteer seedling in pot containing Z. x Ajax and Z. grandiflora; self incompatible (WFU). Holotype (WFU).

Reference Cited

- Flagg, R. O. 1961. Investigations in the Tribe Zephyrantheae of the Amaryllidaceae. Ph.D. thesis, Alderman Library, Univ. Va.